

IN THE CLAIMS

1-11. (Canceled)

12. (Previously presented) A modular switch comprising:

a plurality of backplane sub-buses;

a plurality of cards which are each allocated one or more of the backplane sub-buses;

and

a controller which dynamically allocates the backplane sub-buses to the plurality of cards, based on bandwidth needs of the cards;

wherein the controller calculates, for each of the cards, a bus demand value which represents an entitlement and need of the card to receive a sub-bus, and the controller allocates free sub-buses which are not allocated to the cards with the highest bus demand values; and

further wherein the controller confiscates sub-buses from cards whose bus demand value without the confiscated sub-buses is lower than the bus demand value of a different card after the confiscated sub-buses are transferred to it.

13-23. (Canceled)

24. (Currently amended) The method according to claim [[23]] 30, wherein determining the bandwidth needs of the cards comprises receiving messages from the cards.

25. (Currently amended) The method according to claim [[23]] 30, wherein determining the bandwidth needs of a card comprises determining a measure of utilization of the sub-buses currently allocated to the card.

26. (Currently amended) The method according to claim [[23]] 30, wherein determining the bandwidth needs of a card comprises listening to the sub-buses currently allocated to the card.

27. (Currently amended) The method according to claim ~~[[23]]~~ 30, wherein assigning each of the cards a bus demand value comprises assigning a bus demand value which is a function of a priority of the card.

28. (Currently amended) The method according to claim ~~[[23]]~~ 30, wherein assigning each of the cards a bus demand value comprises assigning a bus demand value which is a function of a minimal number of sub-buses which must be allocated to the card.

29. (Currently amended) The method according to claim ~~[[23]]~~ 30, wherein allocating the sub-buses to the cards comprises allocating sub-buses not currently allocated to a specific card as additional sub-buses to the cards with the highest bus demand values.

30. (Previously presented) A method of allocating sub-buses to cards of a switch, the method comprising the steps of:

- determining bandwidth needs of each of the cards;
- assigning each of the cards a bus demand value which is a function of the bandwidth needs of the card and the current bandwidth allocated to the card; and
- allocating the sub-buses to the cards based on the bus demand values of the cards;

wherein allocating the sub-buses to the cards comprises confiscating sub-buses from cards which have lower bus demand values without the confiscated sub-buses than the bus demand values of other cards with the confiscated sub-buses.

31-39. (Canceled)

40. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein a bandwidth capacity of substantially all the backplane sub-buses is less than the sum of a maximal transmission bandwidth capacity of the cards.

41. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein the controller is implemented by one of the cards.

42. (Previously presented) The switch according to claim 41 wherein the controller is implemented by one of the cards which is selected dynamically.

43. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein the cards transmit messages which indicate their bandwidth needs to the controller.

44. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein each of the cards has a priority value which indicates its entitlement to bandwidth and the controller allocates the backplane sub-buses based on the priority values of the cards.

45. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein substantially all the backplane sub-buses have the same bandwidth capacity.

46. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein the plurality of backplane sub-buses comprise at least two sub-buses with different bandwidths.

47. (Currently amended) The switch according to claim ~~[[39]]~~ 12, wherein the controller confiscates one or more sub-buses from one or more of the cards when the one or more sub-buses are more needed by one or more other cards.

48. (Previously presented) The switch according to claim 47, wherein the controller does not allocate a confiscated sub-bus to a card before it receives confirmation from the card from which the sub-bus was confiscated that the sub-bus was freed from its allocation.

49-67. (Canceled)